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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/505,627	02/16/2000	Nobuhiro Ito	35.C14241	5922
5514	7590	11/18/2004		
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112				
			EXAMINER TALBOT, BRIAN K	
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/505,627

Applicant(s)

ITO, NOBUHIRO

Examiner

Brian K Talbot

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 8-14, 16-31, 34-38, 40 and 42-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-14, 16-31, 34-38, 40 and 42-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/17/04 has been entered.
2. The non-entered amendment filed 8/20/04 has been considered and entered per filing of the RCE. Claims 6,7,15,32,33,39,41 and 51-56 have been canceled. Claims 1-5,8-14,16-31,34-38,40 and 42-50 remain in the application.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 103***

4. Claims 1-5,8-14,16-31,34-38,40 and 42-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dean et al. (5,726,529), Spindt et al. (5,614,781) or Nonomura et al. (5,083,058) further in view of Shibata et al. (6,153,973).

Dean et al. (5,726,529) (abstract, Figs. 1-10, col. 1, line 65 – col. 2, line 12 col. 4, lines 50-60 and col. 6, lines 35-45), Spindt et al. (5,614,781) (abstract, Fig. 2A,6,9B,12A-12D, col. 2,

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line 28 – col. 4, line 10) or Nonomura et al. (5,083,058) (abstract, Fig. 5, col. 3, line 50 – col. 4, line 15) all teach coating the spacer walls with a conductive material including electrodes by a variety of coating processes including, spraying, dipping, evaporation, sputtering, CVD, printing, etc.

While the Examiner acknowledges the fact that the references are silent upon the coating material being liquid and the coating being emitted, it is the Examiner's position that these coating techniques disclosed above incorporate a "liquid" coating material and a source of the coating material, i.e. emitter. Hence, the claimed limitations are taught or at least suggestive by the prior art.

Dean et al. (5,726,529), Spindt et al. (5,614,781) or Nonomura et al. (5,083,058) fail to teach coating the spacer by an ink-jet method.

Shibata et al. (6,153,973) teaches a spacer and image forming apparatus and method of manufacturing whereby the spacer is coated by an ink-jet method (col. 10, lines 8-11, col. 22, lines 12-23, col. 39, lines 60-67, col. 41 line 40 and col. 42, line 40) See also Figs. 3,4,5A,5B,6A,7A-7C and Fig11).

Therefore it would have been obvious at the time the invention was made to have modified Dean et al. (5,726,529), Spindt et al. (5,614,781) or Nonomura et al. (5,083,058) spacer coating process by incorporating an ink-jet method for coating as evidenced by Shibata et al. (6,153,973) with the expectation of achieving similar success.

*Response to Amendment*

5. Applicant's arguments with respect to claims 1-14,16-38,40 and 42-50 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argued that the prior art fail to teach coating the spacer by an ink-jet method.

Shibata et al. (6,153,973) teaches a spacer and image forming apparatus and method of manufacturing whereby the spacer is coated by an ink-jet method

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K Talbot whose telephone number is (571) 272-1428. The examiner can normally be reached on Monday-Friday 6AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P Beck can be reached on (571) 272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 11/16/04  
Brian K Talbot  
Primary Examiner  
Art Unit 1762

BKT